

PIATONOV, G.F., kand.tekhn.nauk

Selecting methods for the study of power distribution in a weakly conducting medium of electric furnaces for industrial use. Izv. vys.ucheb.zav.; energ. 2 no.4:62-72 Ap '59. (MIRA 12:9)

1. Altayskiy Gorno-metallurgicheskiy nauchno-issledovatel'skiy institut AN Kaz.SSR. Predstavlena laboratoriyey promyshlennoy energetiki.

(Electric furnaces)

Power Distribution Between Arc Discharge and Slag
in Enclosed Arc Furnaces

SOV/105-59-1-14/29

SUBMITTED: January 23, 1958

Card 4/4

Power Distribution Between Arc Discharge and Slag
in Enclosed Arc Furnaces

307/105-55-1-14/23

here it results that, at constant power and constant voltage, the electrode with the increase of the specific resistance of the melt sinks in more deeply, and the furnace passes over to the arcless working method. From formulas (1) and (3) it can be seen that the specific resistance of the melt greatly determines the effective specific resistance of the arc plasma. The effective specific resistance of the arc plasma is about equal to the specific resistance of the melt, which corresponds to the experimental data by A. S. Mikulinskiy (Ref 9). To confirm the correctness of the formulas given here, a diagram (Fig 4) compares the calculated and experimental dependences of voltage and resistance of a one-phase furnace on the load current for equal working conditions. Finally, it is pointed out that the application of the principle of least resistance is a purely formal procedure. Consequently, the influence of the secondary processes cannot be determined. But the factors involved exert an essential influence only on the voltage at which the arc discharge occurs. There are 4 figures and 9 Soviet references.

Card 3/4

Power Distribution Between Arc Discharge and Slag
in Enclosed Arc Furnaces

SCV/105-59-1-14/29

R is the total resistance in the section of the circuit "arc - slag", called furnace resistance. On account of the given formulas (1) and (2), the dependence of the furnace resistance on the medium arc length can be found. Formula (3) gives the arc length corresponding to the minimum of resistance R. The results of calculation according to formula (3) agree with the experimental data and the general conclusions (Ref 6): the higher the voltage, and the smaller the equivalent radius of the electrode, the greater is the probability for the formation of the electric arc, and the longer are the arcs. Formula (4) expresses the maximum voltage U_0 which corresponds to the formation of electric arcs. The critical voltage U_k is determined by formula (5). From (4) and (5) it results that electric furnaces with great slag deepness show the maximum resistance in the voltage range $U_0 < U < U_k$. The increase of the furnace resistance at the formation of electric arcs will be the greater, the smaller the power of the furnace. This effect is of small importance to big furnaces. From the mathematical relations obtained

Card 2/4

8(5)

AUTHOR:

Platonov, G. F., Candidate of
Technical Sciences

30V/105-59-1-14/29

TITLE:

Power Distribution Between Arc Discharge and Slag in Enclosed
Arc Furnaces (Raspredeleniye moshchnosti mezhdu dugovym
razryadom i shlakom v elektricheskoy pechi s zakrytoy dugoy)

PERIODICAL:

Elektrichestvo, 1959, Nr 1, pp 58-60 (USSR)

ABSTRACT:

The section of the circuit "arc - slag" may be regarded as two conductors connected in series, the dimensions of which are susceptible to change in the case of change of the electric and geometric parameters. Due to the mobility and the connection of these conductors in series, their resistances are mutually influenced. In considering the principle of the least resistance, and the mobility of arc and slag, it can be assumed that at a voltage sufficient for the formation of an electric arc, the arc discharge only occurs in case of a reduction of the furnace resistance. It is shown that the function $R = f(l_c)$ must produce a minimum, and that the arc discharge tries to cover the whole surface of the depression in the slag (Ref 4). l_c is the length of the arc bundle.

Card 1/4

SOV/136-58-12-7/22

Special Features of Lead Smelting in Electric Furnaces

Thorough hermetisation of the electric furnace is important both from health and efficiency aspects. High-density chrome-magnesite brick can be used for lining with basic (up to 30-35% SiO_2) slags and semi-acid fireclay for more acid slags; firebrick roofs are always satisfactory. Melt depth should be 1 200 - 1 800 mm (of which 1 000 - 1 500 mm is slag) and the surface should be covered with a 300 - 400 mm depth of solid charge. The rating of the furnace should be 80-120 kVA/m² and electrode loading should be 3-5 A/cm². The transformers should have enough range for the optimal voltage for slags of different conductivities to be obtained. There are 6 Soviet references.

Card 2/2

SOV/136-58-12-7/22

AUTHORS: Sychev, A.P. and Platonov, G.F.

TITLE: Special Features of Lead Smelting in Electric Furnaces
(Osobennosti vyplavki svintsa v elektropetchakh)

PERIODICAL: Tsvetnyye Metally, 1958, ³¹Nr 12, pp 28 - 30 (USSR)

ABSTRACT: Investigations and the tests on the 2400 kVA electric furnace at the Leninogorskiy svintsovyi zavod (Leninogorsk Lead Works) have confirmed the known advantages (Ref 1) of electric-furnace lead smelting; with power at 10 kop-eyek/kWh this method is also considerably better economically than shaft smelting. To supply information useful in replacing shaft by electric smelting (designs for which are now being worked out for a lead works) the author discusses the peculiarities of electric smelting and deduces the requirements for its successful use with deep slag layers. Slag (25-35% SiO₂, 8-20% CaO, 25-35% FeO, 8-15% ZnO, 5-8% Al₂O₃) temperature on tapping should be 1 200 - 1 250 °C (1 000 - 1 100 at the walls, 1 300 - 1 350 °C near the electrodes); the lead matte bath should be 700-800 and 1 100 - 1 500 °C, at the bottom and the slag boundary, respectively, the slag should be covered with a layer of solid charge at less than 700-800 °C.

Card1/2

SERGEYEV, P.V.; PLATONOV, G.F.

Establishing efficient parameters for the work of electrically
heated mixers. Vest. AN Kazakh SSR 14, no.9:37-47 S '58.
(Electric furnaces) (MIRA 11:11)

94-4-2/25

Taking Oscillograms of Current and Voltage of Large Arc Furnaces

connected between the electrode and the metal tank of the furnace. If the electrodes are under a liquid in which the voltage drop is small, almost all the drop occurs on the open arc. In this case, the furnace voltage wave-form is practically that of the arc. If the arcs are burning in a medium of poor conductivity, such as slag, a considerable part of the voltage drop occurs in the slag.

In the general case, the voltage on the arc is the difference between the useful phase-voltage of the furnace and the voltage drop in the molten slag or charge. The wave-form of the useful voltage of the furnace may range from sinusoidal to rectangular or trapezoidal. Moreover, as was shown by G.A. Sisoyan and Yu.Ye. Efroyimovich, the thermal conditions of burning of the arc also have a considerable influence on the wave-form of the current and voltage. The oscillograms in Figs. 3a and b illustrate the wave-forms of, respectively, the arc voltage (lower curve) and the general phase-voltage of a furnace for the melting of ferro-chrome. The oscillograms in Fig.4 are also obtained on such a furnace and demonstrate the distortion of the current curve when the arc length is increased. To determine how the method of connecting

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94-4-2/25
Taking Oscillograms of Current and Voltage of Large Arc Furnaces

of rated load, the magnetising current has practically no influence on the main current wave-form. Measuring transformers can then be on the primary side of the furnace transformer and the oscillograph element is connected across a resistive shunt.

Fig. 2A gives current oscillograms resulting from various methods of connecting the oscillograph to a single-phase furnace with open arcs burning in calcium vapour. The two lower curves are obtained with the circuit of Fig. 1c on the primary and secondary side of the main transformer, and are practically identical. The upper curve was obtained with the circuit of Fig. 1a, and is of quite a different wave-form. The curves in Fig. 2d relate to the current in a single-phase lead-melting furnace of 200 kVA when the electrodes scarcely penetrate the slag and there are small arcs between the electrode and the slag. The upper and lower curves were taken with the circuits of Figs. 1a and 1c, respectively: the wave-forms are very different. Similar differences are shown in Fig. 2c, obtained on a three-phase furnace. The reasons for the differing wave-forms are discussed.

Card 3/5 Voltage oscillography is complicated by the fact that the arc gap is usually inaccessible so that the oscillograph must be

94-4-2/25

Taking Oscillograms of Current and Voltage of Large Arc Furnaces

form because the proximity and surface effects are different for different harmonics and because the voltage measured on the length of busbar is effected by its self-inductance. Therefore, when using the circuit of Fig.1a, the more the current deviates from a sinusoidal wave-form, the greater the errors become.

The wave-form distortion can be reduced by connecting the oscillograph element across that part of the circuit where the impedance is mostly resistive, for example, where the current lead is connected to the electrode, as in Fig.1b. However, even this method can only be used when the current is practically sinusoidal.

If oscillograms of non-sinusoidal currents are to have minimum distortion, use should be made of circuit Fig.1c. This is based on the well-known fact that a current transformer with low flux-density in the core will not distort the magnetising flux and the measured current. The current transformer is installed on one busbar of a bundle of busbars. The oscillograph element is connected across a purely resistive shunt.

In the circuit of Fig. 1c, the influence of the non-sinusoidal no-load current of the furnace transformer can be eliminated.

Card2/5 When the furnace transformer is carrying more than about 65-70%

PLATONOV G.F.

AUTHOR: Platonov, G.F.

94-4-2/25

TITLE: Taking Oscillograms of Current and Voltage of Large Arc
Furnaces (Ostsillografirovaniye toka i napryazheniya
moshchnykh dugovykh elektropechey)

PERIODICAL: Promyshlennaya Energetika, 1958, Vol.13, No.4,
pp. 5 - 8 (USSR)

ABSTRACT: Oscillography of current in large industrial electric
furnaces, which may pass many tens of thousands of amperes,
is complicated by the absence of current transformers in the
electrode circuits. It is difficult to register the voltage
wave-form of the furnace arc because the arc gap is inaccessible,
being usually under a layer of slag.

A procedure for taking current oscillograms in large furnaces
is described in the book of G.A. Sisoyan, which gives much
experimental data. Analysis of current and voltage oscillo-
grams of ferrous-alloy and carbide furnaces led to valuable
conclusions about the influence of thermal conditions in these
furnaces on the arc discharge.

Several methods are used to take oscillograms of the current.
The oscillograph element may be connected to one of the busbars
by the short two-wire circuit illustrated in Fig.1a. With
heavy currents, this may give serious distortion of the wave-

Card1/5

PLATONOV, G.F.; VERSHININA, V.V.

Methods of determining the specific resistance of slags. Trudy
Alt. Gornii AN Kazakh. SSR no.7:193-198 '58. (MIRA 12:7)
(Slag--Electric properties)

PLATONOV, G.F.

Determining shape, size and voltage of electric furnaces for
smelting lead. Trudy Alt. GMI AN Kazakh SSR 6:218-233 '58.
(MIRA 12:1)

(Electric furnaces) (Lead--Electrometallurgy)

PLATONOV, G.F.

Determining basic parameters for lead smelting furnaces. Vest.
AN Kazakh. SSR 13 no.6:47-59 Je '57. (MLRA 10:9)
(Smelting furnaces) (Lead--Metallurgy)

PLATONOV, G.F.

Determining parameters for the current feed system of electric
furnaces. Prom. energ. 12 no.5:13-14 My '57. (MLBA 10:6)

1. Altayskiy gorno-metallurgicheskiy institut Akademii nauk
Kazakhskoy SSR,
(Electric furnaces)

PLATONOV, G. F.

137-1958-3-4883

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 61 (USSR)

AUTHOR: Platonov, G. F.

TITLE: The Distribution of Power Throughout the Slag in an Electric Ore-smelting Furnace for Lead Smelting (Raspredeleniye moshchnosti po shlaku rudnotermicheskoy pechi svintsovoy plavki)

PERIODICAL: Tr. Altaysk. gornometallurg. n.-i. in-ta, 1957, Vol 5, pp 139-157

ABSTRACT: The electrical field of the furnace was investigated by means of a model, which consisted of an electrolytic bath geometrically similar to the furnace. The distribution of potentials throughout the bath was investigated together with the distribution of current, and the volumetric distribution of power. It is established that up to 75 percent of heat is generated in the vicinity of the electrodes, which constitutes 30-40 percent of the volume of the bath. The heat transfer in the lower layers of the slag (the settling zone of the bath) occurs by conduction. Sufficient depth of the settling zone is ensured if the total depth of the slag bath is > 2 to 2.5 times as great as the radius of the electrode.

Card 1/2

PLATONOV, G.F.

Studying conditions in three-phase electric furnaces with asymmetrical current supply. Trudy Akd. GNMII AN Kazakh. SSR no.5:111-133 '57.
(Electric furnaces)

SOV/137-58-7-14140

The Power of an Electric Arc Across Slag and the Factors Governing It

The formation of the arc discharge is accompanied by a sudden increase in the R of the furnace and reduction in the current. As V rises, there is a gradual drop in R , and when V attains its critical value, $U_e = U_{e,cr} = a r_e \beta + 2 \sqrt{a r_e \beta}$, the R of the furnace equals the R prior to the formation of the arc. R corresponds to $V = U_{e0}$. The mathematical expressions derived reveal the changes in the R of the furnace, the average length of the arc beam, and also the power required in the arc discharge. The equation determining the R of the bath and corresponding to arcless conditions may be employed to determine the resistivity of the slag under conditions of production. The power released in the arc discharge when the equivalent radius is positive is $< 50(1 + a/U_e) \%$. All other conditions being equal, an increase in r_e is accompanied by a redistribution of the amounts of power required in the arc discharge and the slag; the former portion diminishes and the latter increases. At r_e , the power is $> 50\%$. An increase in the resistivity of the melt across which an arc is burning is accompanied by an increase in the immersion of the electrode in the melt, whereupon the furnace changes to arcless conditions, and vice versa.

1. Electric furnaces--Operation
 2. Furnace electrodes--Performance
 3. Electric ores--Mathematical analysis
 4. Electric ores--Power
- Card 2/2

R. Sh.

SOV/137-58-7-14140

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 24 (USSR)

AUTHOR: Platonov, G. F.

TITLE: The Power of an Electric Arc Across Slag and the Factors Governing It (Moshchnost' elektricheskoy dugi, goryashchey na shlak, i faktory, yeye opredelyayushchiye)

PERIODICAL: Tr. Altaysk. gornometallurg. n.-i. in-ta, 1957, Vol 4, pp 119-151

ABSTRACT: It is remarked that in an electric reduction furnace the resistance (R) of the melt over which the arc burns is significant. Sometimes, in high-slag furnaces, this is the principal resistance. In electric furnaces with deep slag layers the arc discharge arising upon attainment of a given voltage (V) covers almost uniformly the entire surface of immersion beneath arc and electrode. The arc discharge develops when the electrode immersed in real melt receives adequate V , namely, $U_e \geq U_{e0} = a + r_e \beta$, where U_{e0} is the minimum value of V at which arc discharge occurs, a is the total of the V drops in the strata of the arc adjacent to the electrode, β is the V gradient in the core of the arc, and r_e is the equivalent radius of the electrode.

Card 1/2

SERGEYEV, P.V.; PLATONOV, G.F.; PANINA, M.I.; PRON'KIN, V.F.

Electric preheating of boilers for the refining of lead.
TSvet.met.29 no.6:31-34 Je '56. (MLRA 9:9)
(Lead--Electrometallurgy)

SOV/112-57-6-12486

Prospects of Using Electrical Energy for Nonferrous-Metal Production in Altay
energy in the nonferrous metallurgy of the Altay area will expand in the future, making it necessary to consider the problems of complex mechanization and electrification, remote control of large sections and departments producing zinc and lead.

L. Ya. L.

Card 2/2

SOV/112-57-6-12486

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 6,
pp 126-127 (USSR)

AUTHOR: Abdeyev, M. A., Sergeyev, P. V., Ablanov, A. D., Platonov, G. F.

TITLE: Prospects of Using Electrical Energy for Nonferrous-Metal Production
in Altay (Perspektivy vnedreniya elektroenergii v proizvodstvo tsvetnykh
metallov v Altaye)

PERIODICAL: Vestn. AN KazSSR, 1956, Nr 2, pp 59-66

ABSTRACT: The low cost of electric energy at the Ust'-Kamenogorsk and
Bukhtarma Hydroelectric stations makes it economical to use electric energy
in the nonferrous metallurgy of the ore-producing Altay area. At present,
development and testing of electric furnaces for melting lead agglomerates,
electrically heated settlers, refining boilers, etc., are being conducted.
Induction electric furnaces, which have a number of advantages over resistance
furnaces (lower thermal inertia, lower heat loss through the masonry) are
being planned for the Ust'-Kamenogorsk Combine. The use of cheap electrical

Card 1/2

PLATONOV G. F.

137-58-5-9369D

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 80 (USSR)

AUTHOR: Platonov, G. F.

TITLE: Determination of Basic Parameters for Electric Foundry Furnaces Employed for Lead Smelting (K opredeleniyu osnovnykh parametrov rudnotermicheskikh pechey svintsovoy plavki)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Altaysk. gorno-metallurg. n. i. in-t AN KazSSR (Altay Scientific Research Institute for Mining & Metallurgy, Academy of Sciences, Kazakhstan SSR), Ust'-Kamenogorsk, 1956.

ASSOCIATION: Altaysk. gorno-metallurg. n. -i. in-t AN KazSSR (Altay Scientific Research Institute for Mining & Metallurgy, Academy of Sciences, Kazakhstan SSR), Ust'-Kamenogorsk.

1. Electric furnaces--Design 2. Lead ore--Processing

Card 1/1

Platonov, G. F.

PLATONOV, G.F.:

Automatic control in leaching sections of zinc plants. (MIRA 10:10)
TSvet.met. 27 no.4:11-13 J1-Ag '54.

1.Gorno-metallurgicheskiy nauchno-issledovatel'skiy institut
AN Kazakhskoy SSR.

(Zinc--Metallurgy)
(Automatic control)

KRAVCHENKO, I.P.; PLATONOV, G.D.

Mechanizing the charging of grog into a jaw crusher. Ogneupory
29 no.4:186-187 '64. (MIRA 17:4)

1. Orsko-Khalilovskiy metallurgicheskiy kombinat.

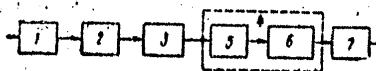
PLATONOV, G.D., uchenyy sekretar'

Leningrad Branch. Izv.A31A no.157-158 '59.
(Leningrad--Building research)

(MIRA 1286)

L 27365-66

ACC NR: AP6005288



1--frequency-controlled carrier frequency oscillator; 2--converter for changing the carrier frequency oscillations to square pulses; 3--circuit for separating the trailing edge of the pulses; 4--unit made up of driven multivibrator; 4 and 6--circuit for separating the trailing edge of the multivibrator pulses; 7--frequency detector.

SUB CODE: 09/

SUBM DATE: 22Mar65

Card 2/2 *Lo*

L 27365-66 EWT(1)/EWA(h)
 ACC NR: AP6005288
 SOURCE CODE: UR/0413/66/000/001/0033/0030

INVENTOR: Rasshcheplyayev, Yu. S.; Platonov, G. B.

ORG: none

TITLE: A device for delay of electric signals. Class 21, No. 177453

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 33

TOPIC TAGS: delay circuit, electronic oscillator, carrier frequency, multivibrator, pulse shaper

ABSTRACT: This Author's Certificate introduces: 1. A device for delay of electric signals. The unit contains a frequency-controlled carrier frequency oscillator, a converter for changing the carrier frequency oscillations to square pulses and a circuit for separating the trailing edge of these pulses. The device is designed for controlling signal delay time without power attenuation. A unit made up of a driven multivibrator and a circuit for separating the trailing edge of the carrier frequency square pulses in series with a frequency detector. The signal to be delayed is fed as the control signal to the input of the carrier frequency oscillator. 2. A modification of this device in which the delay time is increased by series connection of n units consisting of driven multivibrators and circuits for separating the trailing edge of the multivibrator pulses.

Cord 1/2

UDC: 621.374.5

PLATONOV, G.A., inzh.

Improved conditions of the work of dispatchers. Zhel. dor. transp.
47 no.6:33-35 2a 165.
(MIRA 1946)

KRAVCHENKO, I.P.; PLATONOV, G.D.; BRICHKO, A.I.

Preheaters for presses for the stiff mud process. *Getalorny*
30 no.2:47 '65. (MOS) 1965.

1. Orsko-Khmelilovskiy metallurgicheskiy kombinat (for Kravchenko,
Platonov). 2. Magnitogorskiy metallurgicheskiy kombinat (for
Brichko).

PLATONOV, GEORGIY DMITRIYEVICH.

317N/5

884.I

ARKHITEKTURA SHKOL'NYKH ZDANIY Leningrada ARCHITECTURE
OF SCHOOL BUILDINGS IN LENINGRAD Leningrad, Gos. IZD-VO. LITERATURNY
PO STROITEL'STVU I ARKHITECTURE, 1954.

.P7

180, 1 P. ILLUS., DIAGRS., TABLES. AT HEAD OF TITLE-PAGE: AKADEM IYA
ARKHITEKTURY SSSR. LENINGRADSKIY FILIAL.

BIBLIOGRAPHY: P. 181.

PLATONOV, G.A., inzh.

Centralization of dispatcher operations and the distribution of
traffic control points. Zhel.dor.transp. 45 no.8:46-49 Ag
'63. (MIRA 16:9)
(Railroads--Signaling--Centralized traffic control)

A comparative study of the lipase of tissue (1).
 Platynov, April M. / Zernova. *J. Physiol. U.S.S.R.* 23,
 133-5 (in French) 1957 (1957). The lipase of lung tissue
 (1) is 3-4 times less active than that of the liver. At pH
 4.49 the I of cats, rabbits, dogs and rats show practically
 the same activity. At pH 7.38 the activity increases 2-3
 times, the increase being greater in rabbits and rats.
 Liver lipase shows a greater activity at pH 4.49 than at
 7.38, as does the lipase of the lymphatic gland which also
 always shows less activity than I. S. A. Karjala

ASTM 33.4 METALLURGICAL LITERATURE CLASSIFICATION

PLATONOV, G., kand.arkhitektury; POZDNYAKOV, P., kand.arkhitektury

Types of apartments which allow for the structure of families. Na
stroi. Ros. 3 no.1:24-25 Ja '62. (MIRA 16:5)
(Apartment houses)

PLATONOV, G., kand.arkhitektury; POZDNYAKOV, P., kand.arkhitektury

Planning apartments on the basis of demographic data. Zhil. stroi.
no.1:1 '62. (MIRA 16:1)

(Apartment houses)

1. G. PLATONOV
2. USSR (600)
4. Biology - Philosophy
7. Philosophical significance of Michurin's biology. Nauka i zhizn 19 no. 12. 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

L 44594-66

ACC NR: AR6010520

of the oxide film itself and on the surface of the electrode, which hamper the transition of the electrons from the metal to the oxide.

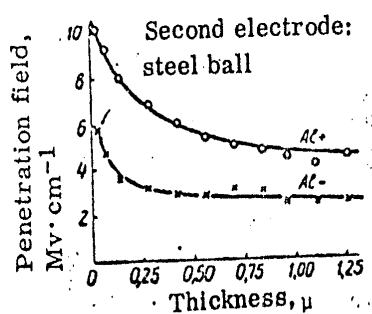


Fig. 1

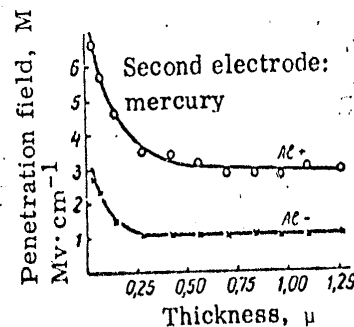


Fig. 2

For oxide films that are not very thick, the determining stage of breakdown is the injection of electrons from the cathode into the conduction band of the dielectric, and in very thin layers (<0.3μ) the process of the development of impact ionization becomes determining. [Translation of abstract] 4 illustrations, 2 tables, and bibliography of 10 titles. A. Petrashko

SUB CODE: 11

Card 2/2

522

L 44594-66 EWT(m)/T/EWT(:)/ETI IJP(c) DS/JD

ACC NR: AR6010520

SOURCE CODE: UR/0196/65/000/010/B023/B023

AUTHOR: Odynets, L. L.; Platonov, F. S.; Raykerus, P. A.TITLE: Electric strength of oxide films on aluminum ²⁷₁₆ ✓

SOURCE: Ref. zh. Elektrotehnika i energetika, Abs. 10B114

REF SOURCE: Sb. Proboy dielektrikov i poluprovodnikov. M.-L., Energiya, 1964, 319-322

TOPIC TAGS: aluminum, electric property, electrochemistry, surface film, aluminum oxide ¹⁶₁₆

ABSTRACT: The electric strength of oxide films obtained on aluminum of grade AV000 (purity 99.99%) was investigated by electrochemical oxidation in an aqueous solution of boric acid (30 g/liter) and borax (0.05 g/liter) at 85C. Figures 1 and 2 show the electric strength of the films as a function of the thickness and polarity. The decrease in electric strength at negative polarity of the aluminum is explained by the fact that in this case the metal lattice makes a direct transition to the oxide lattice and the height of the potential barrier at the metal-oxide boundary, which the electrons must overcome in order to enter the conduction band of the oxide layer, is determined only by the difference of the work function of the metal and its oxide. This barrier is quite low. At negative polarity of the second electrode, the height of the barrier is determined to a considerable degree by different surface states, originating both on the surface.

Card 1/2

UDC: 621.315.612.8.015.5:621.319.46

ZAOZERSKIY, Ivan Nikolayevich, zasl. deyatel' nauki i tekhniki
doktor khim. nauk, prof.; KOTLYAROV, Rostislav
Vladimirovich; PLATONOV, Fedor Petrovich; POLCSIN,
Vasiliy Alekseyevich, dots.; RYABKOV, Vasiliy Aleksandrovich
[deceased]; TER-SHMAONOV, Georgiy Abramovich; FINOGENOV,
Mikhail Yur'yevich, dots.; MISHIN, V.P., nauchnyy red.;
STUKOVNIN, N.D., red. ~~12d-va~~; GRIGORCHUK, L.A., tekhn. red.

[Inorganic chemistry] Neorganicheskaya khimiya. [By] I.N.
Zaozerskii i dr. Moskva, Gos.izd-vo "Vysshaya shkola," 1963.
525 p. (MIRA 16:8)

(Chemistry, Inorganic)

RACHINSKIY, V.V., doktor khimicheskikh nauk; PLATONOV, F.P., kand.
khimicheskikh nauk

Radioisotope laboratory at the Timiriazev Academy. Izv. TSKhA
no. 6:239-250 '59. (MIRA 13:6)
(Radioisotope laboratories)

PLATONOV, F.P., zootekhnik

Collective farm poultry sections in the Chuvash A.S.S.R.
Ptitsevodstvo 8 no.9:12-13 S '58. (MIRA 11:10)
(Chuvashia--Poultry)

PLATONOV, F.P., kandidat khimicheskikh nauk.

Canker of the potato. Nauka i zhizn' 20 no.6:47 Je '53. (MLA 6:6)
(Potatoes--Diseases and pests)

2

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Reversible reciprocal system of nitrates and chlorates of potassium and sodium. V. P. Platonov. *Trudy Moskov. Vsesoyuzn. Khim. Akad. im. A. A. Timiryazeva* 1946, No. 30, 57-60.—The system was investigated by studying the 6 possible binary systems and 9 quaternary systems. The m.p.s. of the pure compds. were: NaNO_3 , 308°; KNO_3 , 338°; NaClO_3 , 258°; KClO_3 , 365°. The heat of the reaction $\text{NaNO}_3 + \text{KClO}_3 = \text{KNO}_3 + \text{NaClO}_3$ was calcd. from heats of formation and was found to be 0.57 kcal. All 6 binary systems form solid solns. over the entire concn. range with min. in the respective curves as follows: NaNO_3 - KNO_3 , 290°, 80% KNO_3 (all concns. in mole %); KNO_3 - KClO_3 , 296°, 60% KNO_3 ; KClO_3 - NaClO_3 , 236°, 80% NaClO_3 ; NaNO_3 - NaClO_3 , 218°, 46% NaNO_3 ; NaNO_3 - KClO_3 (stable diagonal), 206°, 62% NaNO_3 ; NaClO_3 - KNO_3 (metastable diagonal), an extremely flat min. at 212°, 30% KNO_3 . Planar and 3-dimensional diagrams were constructed for the system. The crystn. surface is synclinal with a min. at 200° about half-way between the center of the diagram and the NaClO_3 - NaNO_3 min. All 4 salts appear as isomorphous crystals over the entire crystn. surface with the exception of a region in the neighborhood of the min. point where there is some evidence for decompn. of the solid solns. A. J. M.

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Irreversible-reciprocal system of fluorides and iodides of sodium and potassium, of the transition-to-singular type. P. P. Platonov. *Izudy Alubov. Sel'sko-Khoz. Akad. na R-A. Timiriazova* 1946, No. 36, 49, 50.

The 4 lateral binary systems, the 2 diagonal binary systems, and 6 quaternary cross-sections were investigated to characterize the reciprocal system. The system NaI-NaF is a simple eutectic system, the m.p. decreasing from 667° for NaI to a eutectic m. 603°, contg. 18 (mole) % NaF, then rising to 680° for NaF. The KF-KI system is of the same type, the m.p. decreasing from 850° for KF to a eutectic m. 644°, contg. 34% KF, then rising to 680° for KI. NaI and KI form a continuous series of solid solus., with m.p.s. of mixts. going through a min. of 583° at 42% KI. KF and NaF form a simple eutectic m. 710°, contg. 40% NaF, and there is a limited range of solid solus., with KF dissolving in NaF to the extent of approx. 4%, and NaF in KF about 10%. The stable diagonal cross-section NaF-KI forms a simple eutectic, m. 631°, contg. 12% NaF. This is a stable system, since the solid phases are the pure components NaF and KI, and none of the products of their reaction appears in the diagram. The metastable diagonal cross-section KF-NaI has 3 crystn. regions: a NaI region from NaI down to a eutectic m. 578°, contg. 12% KF; a KF region from KF down to a eutectic m. 678°, contg. 78% KF, and a central region characterized by a max. at 840°, 50% KF, and corresponding to the reaction product NaF. In this central region, below the liquidus curve there are other metastable equil. with the result that the curve showing the temp. of complete solidification decreases from the eutectic at 678° to another eutecticlike point at about 540°, 60% KI, then goes through a max. of 620° at 50% KI, decreases to a broad min. of 500° at 30% KI, and rises gradually to the eutectic at 378°. From these data and those of the quat-

ernary cross-sections, a 3-dimensional model was constructed for the reciprocal system, and the conventional planar representation by projection of the model on the compn. plane. The stable diagonal NaF-KI divides the diagram into 2 ternary systems: (1) the NaF-KI-KI system contg. 3 regions where the solid phases are NaF, KI, and KF, resp., and a ternary eutectic point at 512° contg. 95.5% K, 64.5% I; (2) the system NaF-KI-NaI contg. 2 crystn. regions where the solid phases are NaI and solid soln. of NaI in KI, with a min. in the compn. curve at 600°. The entire reciprocal system thus has 3 crystn. regions, where the solid phases are NaF, KF, and solid solns. of NaI in KI. In the NaF region, which occupies most of the diagram because of its smaller soly., the isotherms below 700° intersect at very oblique angles, an indication of the irreversibility of the system and of the fact that this irreversible-reciprocal system is of the transition-to-singular type. A comparison of the systems NaF-KCl, NaF-KBr, and NaF-KI shows that increasing heats of reaction (7.6, 9.1, and 10.6 kcal., resp.) are associated with increasing areas of crystn. of the stable components in the resp. systems in planar representations (73.73, 77.85 and 82.54% of the total area, resp.) and by increasing vols. of crystn. in 3-dimensional models (82.79, 86.78, and 87.89%, resp.).

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shifted towards $\text{Ti}_2\text{SO}_4 + \text{AgI}$ that the stable components do not exchange appreciably, and consequently the surface of the 3-dimensional model corresponding to the stable diagonal cross-section is a singular surface where the regions of crystn. intersect the limits layer formation, which extend at 508° from 11% to 86% AgI and take up 8.56% of the total area of the square. For the first time the planimeter method was used to det., not only the area of the square diagram corresponding to the crystn. of any salt, but also the vols. concerned in the 3-dimensional models. Studies were made of the vol. of crystn. assocd. with various components in the reciprocal systems of sulfates and halides of Ti and Ag, and it was verified by graphical methods that there is a direct relation between the vol. of crystn. of the stable components in the resp. reciprocal systems and the heat of the double decompn. reaction. Thus, values for vol. of the stable components in percentage of the total vol. of the 3-dimensional model and for the heat of reaction in kcal. are: $\text{Ti}_2\text{SO}_4 + \text{AgCl}$, 79.20, 9.04; $\text{Ti}_2\text{SO}_4 + \text{AgBr}$, 79.70, 9.55; $\text{Ti}_2\text{SO}_4 + \text{AgI}$, 86.63, 11.50.

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Irreversible-reciprocal singular-type layering system of oxides and iodides of thallium and silver. P. P. Platonov. *Trudy Moshov. Sel'sko-Khoz. Akad. im. K. A. Timiryazeva* 1946, No. 36, 13-41; cf. C.A. 32, 8903: 8904. The system was studied by the synthetic method of thermal analysis. The darkening of melts of iodides necessitated the use in some cases of the Tyndall effect to observe the appearance of first crystals or the first drops of a new liquid phase. M.p.s. of the four pure compds. were: Ag_2SO_4 , 556°; AgI , 553°; TlI , 442°; Tl_2SO_4 , 632°. In the system Ag_2SO_4 - Tl_2SO_4 the m.p. decreases from that of Ag_2SO_4 to a eutectic m. 407°, contg. 33% Tl_2SO_4 (all compns. in equiv. %); rises to 516°, the m.p. of the congruently-melting compd. $\text{Ag}_2\text{SO}_4 \cdot \text{Tl}_2\text{SO}_4$; falls to a second eutectic m. 510° contg. 63% Tl_2SO_4 ; then rises to the m.p. of Tl_2SO_4 . The low-melting mixts. were very viscous and crystallized with difficulty. The system AgI - TlI has a compd., $2\text{TlI} \cdot \text{AgI}$, melting congruently at 322°, with a eutectic on the TlI side m. 320°, contg. 30% AgI , and one on the AgI side m. 305°, contg. 69% AgI . The system Ag_2SO_4 - AgI has a eutectic m. 142°, contg. 53% AgI , and there is a transition from α - to β - Ag_2SO_4 at 412°. The system Tl_2SO_4 - TlI has a simple eutectic m. 306°, contg. 67% TlI . In the stable diagonal system Tl_2SO_4 - AgI , as AgI is added to Tl_2SO_4 the m.p. decreases from 632° to 598°, at 11% AgI . At this point two liquid layers are formed, and this condition is maintained until the AgI concn. reaches 86%. The m.p. then drops rapidly to a eutectic m. 504°, contg. 94% AgI , and then rises to the m.p. of AgI . The darkening of the melts prevented the exact detn. of the upper limit of the two-liquid-phase

region, but extrapolation indicated that it was approx. 730° at about 80% AgI . The metastable diagonal system Ag_2SO_4 - TlI has 5 regions of crystal. in which the stable solid phases are, resp.: α - Ag_2SO_4 , β - Ag_2SO_4 , Tl_2SO_4 , $\text{Ag}_2\text{SO}_4 \cdot \text{Tl}_2\text{SO}_4$, and TlI . The m.p. decreases from that of Ag_2SO_4 , passes the transition temp. for α - to β - Ag_2SO_4 at 412°, drops to a eutectic m. 320°, contg. 18% TlI , enters the region where the solid phase is $\text{Tl}_2\text{SO}_4 \cdot \text{Ag}_2\text{SO}_4$, goes through an extremely flat max. of 330°, contg. 23% TlI , drops to a min. at 320°, 25% TlI , then enters the Tl_2SO_4 region with the m.p. rising to 598°, 47% TlI . Here 2 liquid layers form, extending to 55% TlI , after which the m.p. decreases to a min. at 338°, 84% TlI , where it reaches the TlI region, and the m.p. then rises to the m.p. of TlI . These data on the binary mixts. together with 18 quaternary cross-sections, permitted construction of the reciprocal system. In the ternary system Tl_2SO_4 - AgI - Ag_2SO_4 , which is half of the reciprocal system, divided along a diagonal, there are: 5 crystal. regions (α - Ag_2SO_4 , β - Ag_2SO_4 , $\text{Ag}_2\text{SO}_4 \cdot \text{Tl}_2\text{SO}_4$, AgI , Tl_2SO_4); a ternary eutectic m. 87°, contg. 53% SO_4 , 97% Ag ; a ternary peritectic point at 110°, contg. 53% SO_4 , 94.5% Ag ; and a transition point at 412°, contg. 91% SO_4 , 76% Ag . The system Tl_2SO_4 - AgI - TlI , which is the other half of the reciprocal system, has: 4 crystal. regions (Tl_2SO_4 , AgI , $2\text{TlI} \cdot \text{AgI}$, TlI); a ternary eutectic m. 200°, contg. 1.5% SO_4 , 68% Ag ; a ternary peritectic point at 300°, contg. 4% SO_4 , 31.5% Ag . The formation of liquid layers occurs in a cigar-shaped region along the AgI - Tl_2SO_4 diagonal of the square planar diagram. The equil. for the double decomposition reaction in the reciprocal system is so completely

POVZE, M.; PLATONOV, F., aspirant

What we gain from the loose housing of cattle. Tekh.v sel'khoz.
19 no.5:4-5 My '59. (MIRA 12:7)

1. Predsedatel' kolkhoza imeni XX parte"yezda, Kuntsevskogo rayona,
Moskovskoy oblasti (for Povze). 2. Vsesoyuznyy nauchno-issledovatel'-
skiy institut ekonomiki sel'skogo khozyaystva (for Platonov).
(Dairy barns)

TITLE :
 CATEGORY : Cultivated Plants. M
 Grains. Legumes. Tropical Cereals.
 ABS. JOUR. : SZhBiokh., No. 3, 1959, No. 10941
 AUTHOR : Platonov, F. I.
 ET. :
 LE : The Methods of Raising the Yielding Ability of Corn to
 the End of the Century.
 ORIG. PUB. : Kukuruzn., 1958, No. 3, 23-26
 ABSTRACT : No abstract.

CARD: 1/1

COUNTRY	: USSR	
CATEGORY	: Cultivated Plants.	M
	Grains. Legumes. Tropical Cereals.	
ARS. JOUR.	: RZhBiol., No. 3, 1959, No. 10927	
AUTHOR	: Platonov, F. I.	
INST.	: Far Eastern Scientific Research Institute of Agriculture.	
TITLE	: On Some Problems of Agricultural Technique for Corn in the Far East.	
ORIG. PUB.	: Byul. nauchno-tekhn. inform. Dal'nevost. n.-i. in-ta s. kh., 1957, 3, 3-6.	
ABSTRACT	: On the basis of the data of experimental institutions and the leading collective farmers of the DVE (Far Eastern Kray), there is cited a list of promising breeding, hybrid and foreign (Chinese) varieties and recommendations with respect to the agricultural technique for this crop: plantings on the layer and turned layer of perennial grasses, on the clover and soybean green-manured fallow fields, on the turned layer of virgin lands, in the fields after potatoes and vegetable crops - according to different regions of the Kray. Also cited are: the pre-planting cultivation of the soil, fertilizing on shallow top soils;	
CARD:	1/2	

COUNTRY	: USSR	
CATEGORY	: Meadow Cultivation.	L
ABST. JOUR.	: RZhBiol., No. 2, 1959, No. 10395	
AUTHOR	: Pashchenov, A. I., Gordin, S. I.	
INST.	: Far Eastern Scientific Research Institute of Agriculture	
TITLE	: Improvement of Meadows and Pastures in the Far East.	
ORIG. PUB.	: Symb. Nauchno-Tekhn. Inform. Dal'nadvost. n.-i. in-ta s.kh. 1957, No. 24-26.	
ABSTRACT	: No abstract.	

28-28

4) ters.

ARKHIPOV, P.; PLATONOV, F., zootekhnik-ekonomist

Work and plans of machinery operators of the Volokolamskii
State Farm. Tekh. v sel'khoz. 20 no.7:32-34 J1 '60.
(MIRA 13:9)

1. Direktor sovkhoza "Volokolamskiy", Moskovskoy oblasti
(for Arkhipov).
(Moscow Province---Farm mechanization)

PLATONOV, P.; KOZNEV, I.

Potatoes

Storing potatoes. Trud i zhizn' USSR, No. 8, 1955.

Monthly List of Russian Accidents, Library of Congress, June 1955. 1955.

ZAYTSEV, V., Geroy Sotsialisticheskogo Truda; PLATONOV, F., aspirant

Introducing over-all mechanization in field-crop production
and in animal husbandry. Nauka i pered.op.v sel'khoz. 9
no.8:5-7 Ag '59. (MIRA 12:12)

1. Predsedatel' kolchoza "Pobeda, "Yal'chikskogo rayona,
Chuvashskoy ASSR (for Zaytsev). 2. Vsesoyuznyy nauchno-issledovatel'-
skiy institut ekonomiki sel'skogo khozyaystva (for Platonov).
(Farm mechanization)

PLATONOV, G.

Self-training in military educational institutions. No 12.

Tankist, No 12, 1948.

SHISHKIN, K. A. (Prof.); GUREVIYA, A. N.; STEPANOV, A. D.; PLATONOV, E. V.
PLATONOV, E. V.

Sovetskie Teplovtsy (Soviet Diesel Locomotives), 116 p., Moscow, 1951.

PLATONOV, E. E. and KARTASHOVA, T. P.

Insensibilization in preparation of cavity with Tetrastrom Polystyrene, Moscow 1963, 11 (22-23)

Paragraph 3372

A method for producing insensibility in cavity with Tetrastrom Polystyrene is described. The following solution is used: acetone 0.1 g., acid. crystal. 1.5 g., chloroform benzol 10 g., solid crystal 1 g., aqua dest. 3 g. After the cavity has been dried, application on cotton for three minutes.

SO: Section II Vol. 3 1-6

PLATONOV, G.

"Contributions to the study of the role of inhibition by means of hypnotic sleep in the treatment of pathologic states in man. Tr. from the Russian", p. 16 (Analele Romano-Sovietice, Seria Medicina Generala, Series a III-a, v. 6, no. 2, Mar./Apr. 1953, Bucuresti)

SO: Monthly List of East European Russian Accessions, Vol. 2, No 9, Library of Congress, September 1953, Uncl.

RABINOVICH, B.V.; PLATONOV, B.P.; REZINSKIKH, F.F.

Thin-walled molds. Lit.proizv. no.7:10-14 JI '61. (MFA 14:7)
(Molding (Founding))

PLATONOV, B. P., RABINOVICH, Benedikt V., REZTNSKICH, F. F.,

"Thin-walled sand molds"

To be submitted for the 28th International Foundry Congress, Vienna, Austria, 19-24
June 1961.

SOV/113-58-11-9/16

AUTHORS: Kurtov, I. F., Candidate of Technical Sciences, Platonov, E. F.

TITLE: The Reasons for the Formation, and the Prevention of Cracks in the Castings of Cylinder Blocks (Prichiny obrazovaniya i preduprezhdeniye treshchin v otlivkakh blokov tsilindrov)

PERIODICAL: Avtomobil'naya promyshlennost', Nr 11, 1958, pp 30 - 33 (USSR)

ABSTRACT: The Gor'kiy Motor Vehicle Plant employs diverse methods of crack prevention in the casting of cylinder blocks of the GAZ-51 automobile. Crack formation occurs mostly in the wall of the valve box, the central cylinders, the wall of the crankcase, the wall of the water jacket, and the ducts to the technologically necessary plug-stoppered openings. The reasons for crack appearance in such parts upon casting are given, and solutions for their avoidance are presented. These solutions include data on the chemical composition of the casting material, casting methods and mathematical formulae. There are 10 sets of diagrams, 1 graph and 1 table.

ASSOCIATION: Gor'kovskiy avtozavod (The Gor'kiy Automobile Plant)

Card 1/1 1. Materials---Casting 2. Materials---Fracture 3. Materials
 ---Deformation 4. Materials---Properties

Platenko, B. P.

137 1957 12 24066

Translation from Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 166 (USSR)

AUTHOR: Platenko, B. P.

TITLE: Sand and Slag Blasters in Cast Iron (Pecchnyye i shlakevyye oborudovaniya dlya chugunnykh otlivalok)

PERIODICAL: Vkh. Nozheva i dr. preizved. Nr 2, Gor'kiy, Knigoizdat, 1957, pp 67-71

ABSTRACT: The primary measure in lowering the amount of "poilage" due to contamination and slag are as follows: 1) increasing the stability of the pouring basin, which, during pouring is subjected to the action of the hottest portion of metal, by the employment of a core mixture containing clay; 2) the employment of filters with cross-sectional area of orifices increased by 20 percent as compared with the normal size for a given rate of filling up of the mold; 3) the evacuation of gas from the walls of the mold; 4) spraying dry cores with paint instead of dipping them in a damp state; 5) the employment of a siphon type casting ladle with pouring accomplished through a pipe made of fire clay sections.

Card 1/1

S Sh.

1. Cast iron-Casting
2. Cast iron-Preparation
3. Cast iron-Quality control

PLATONOV, B., gvardii podpolkovnik.

Battle initiative; military engineers' battle experience. Voen.-inzh.
zhur. 101 no.4:12-13 Ap '57. (MLRA 10:6)
(Demolition, Military) (World War, 1939-1945)

DEGTYAREV, I., polkovnik, kand. voyennykh nauk; PLATONOV, B., leytenant;
VOROTNIKOV, M., polkovnik.

The training of tank crews. Tankist. no.5:19-21 My '58.
(Tank warfare) (Military education) (MIRA 11:6)

ALLAKHVERDIYEV, A.G., dotsent; KULIYEV, A.Kh., dotsent; GUSMAN, S.M.,
prof., doktor med.nauk, red.; PLATONOV, B., red.; MIRDZHAFAROV, A.,
tekhn.red.

[Naphthalan and its therapeutic use] Naftalan i ego lechenoe
primeneniye. Baku, Azerbaidzhanskoe gos.izd-vo, 1959. 186 p.
(MIRA 14:2)

(NAPHTALAN--PETROLEUM--THERAPEUTIC USE)

BAYKOV, T.P.; VEKSER, A.A.; GORCHINSKIY, S.A.; LARIONOV, A.G.; PLATONOV, A.V.; CHUMAYEVSKIY, A.V.; SAFRONOV, P.M., inzhener, redaktor; SOKOLOVA, T.F., tekhnicheskiiy redaktor; MATVEYEVA, Ye.B., tekhnicheskiiy redaktor

[Agricultural machinery and spare parts for it; a reference manual]
Sel'skokhoziaistvennyye mashiny i zapasnye chasti k nim; spravochnik.
Izd. 3-e, ispr. i dop. Pod red. P.M.Safronova. Moskva, Gos. nauchno-
tekhn. izd-vo mashinostroit. lit-ry. Vol.1. [Machines for tilling,
sowing and planting, mechanization of livestock farms, for the
protection of plants from pests and primary processing of industrial
crops] Mashiny dlia obrabotki pochvy, poseva i posadki, mekhanizatsii
zhivotnovodstva, dlia zashchity rastenii ot vreditel'ei i pervichno'
obrabotki tekhnicheskikh kul'tur. 1956. 706 p. (MLRA 9:11)
(Agricultural machinery)

PLATONOV, A. V.

PLATONOV, A. V. -- "Race Horses of the Sharakovets State Breeding Farm and Methods of Improving Them." Yerevan Zooveterinary Inst. Yerevan, 1955.
(Dissertation for the Degree of Candidate in Agricultural Sciences).

SO: Knizhnaya Letopis', No 9, 1956

PLATONOV, Anatoliy Vasil'yevich

BAYKOV, Timofey Petrovich; VEKSER, Abram Aronovich; GORCHINSKIY, Sergey Antonovich; LARIONOV, Aleksandr Grigor'yevich; PLATONOV, Anatoliy Vasil'yevich; CHUMAYEVSKIY, Aleksey Vasil'yevich; ~~SAFRONOV, P.M.~~, inzh., red.; AVSHAROVA, Ye.G., red. izd-va; UVAROVA, A.P., tekhn. red.

[Agricultural machines and spare parts for them; handbook] Sel'skokhoziaistvennyye mashiny i zapasnye chasti k nim; spravochnik. Izd. 3., ispr. i dop. Pod red. P.M. Safronova. Moskva, Gos. nauchno-tekh. izd-vo mashinostroit. lit-ry. Vol.2 [Harvesting machines for grains, grasses and industrial crops] Mashiny dlia uborki zernovykh, tekhnicheskikh kul'tur i trav. 1958. 723 p.
(Harvesting machinery) (MIRA 11:10)

BAYKOV, T.P.; VEKSER, A.A.; GORCHINSKIY, S.A.; LARIONOV, A.G.;
PLATONOV, A.V.; CHUMAYEVSKIY, A.V.; SOLOV'YEV, D.I., inzh.
red.; SOKOLOVA, T.F., tekhn. red.

[Agricultural machines and their spare parts; a manual] Sel'sko-
khoziaistvennye mashiny i zapasnye chasti k nim; spravochnik.
2., ispr. i dop. izd. Pod red. D.I.Solov'yeva. Moskva,
Mashgiz. Book 1.[Machines for tillage, sowing, and planting, for
plant protection, and for livestock farms] Mashiny dlia obrabotki
pochvy, poseva, i posadki, dlia zashchity rastenii i dlia zhivot-
novodcheskikh ferm. 1953. 615 p. (MIRA 16:2)

1. Russia (1923- U.S.S.R. Ministerstvo sel'skokhozyaystvennogo
mashinostroyeniya.

(Agricultural machinery)

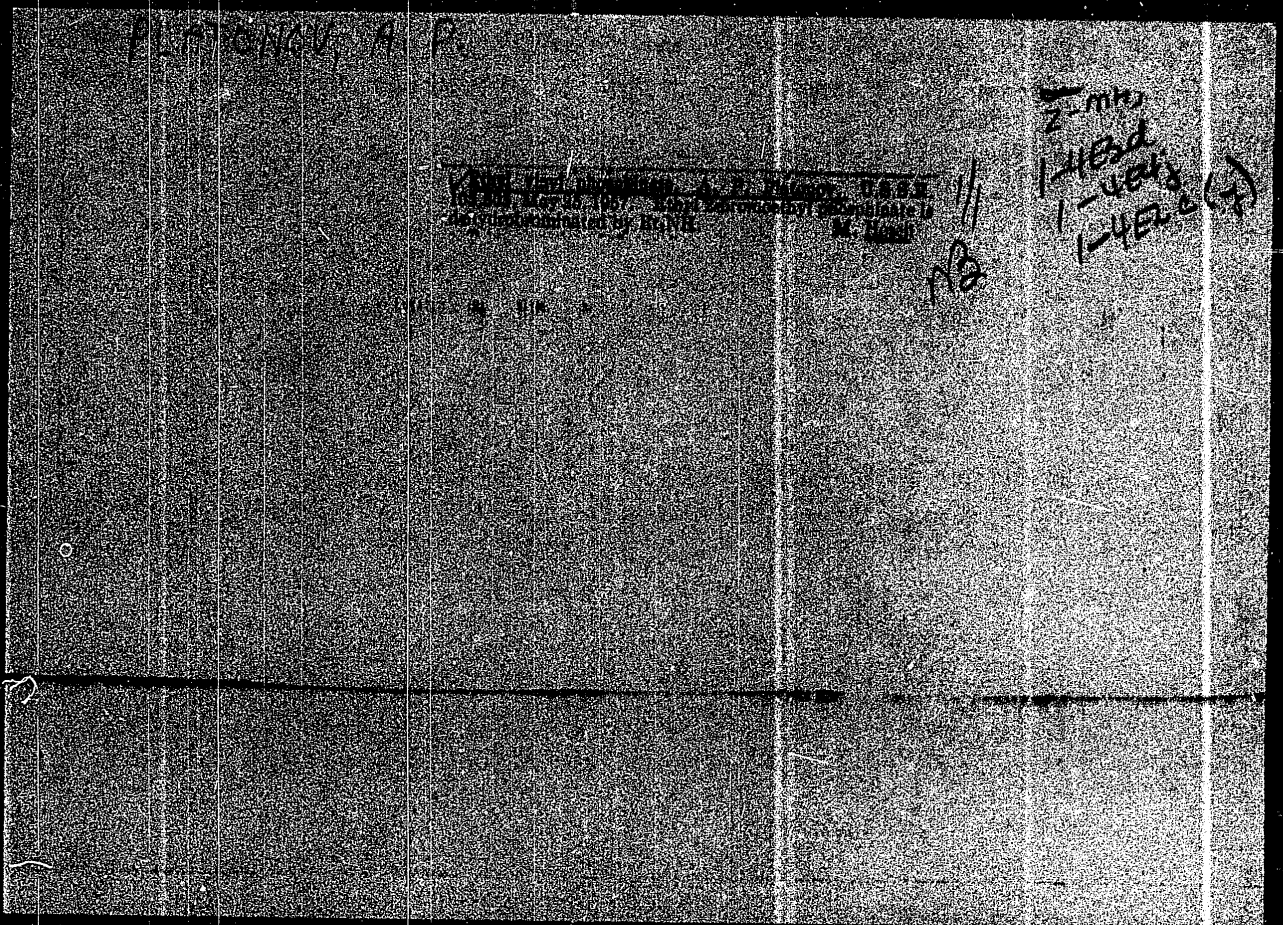
PINTELIN, Aleksandr Vasil'yevich; PLATONOV, A.V.; FEDOROV, N.F.;
PESTRYAKOV, A.I., red.; GUREVICH, M.M., tekhn.red.

[Spare parts list for grain harvesting combines] Katalog
zapasnykh chastei k zernoubornym kombainam. Moskva, Gos.
izd-vo sel'khoz.lit-ry, 1959. 238 p. (MIRA 14:12)
(Combines (Harvesting machinery))

CHIZHIK, Ivan Andreyevich, prof.; PLATONOV, A.V., red.; SMIRNOVA,
M.I., tekhn. red.

[Animal husbandry; laboratory and practice lessons] Zhivotno-
vodstvo; laboratorno-prakticheskie zaniatia. Moskva, Uch-
pedgiz, 1963. 414 p. (MIRA 17:3)

ILLEGIBLE



PLATONOV, A.N., inzh.

Cutting expenses in grain transportation. Zhel.dor.transp. 42
no.8:36-40 Ag '60. (MIRA 13:8)
(Grain--Transportation)

PLATONOV, Aleksey Nikitovich; MARKHOV, V.P., spets. red.; KEYZER,
V.A., red.; SAVEL'YEVA, Z.A., tekhn. red.

[Marketing costs of grain receiving depots] Izderzhki obra-
shcheniia khlebopriemnykh predpriatii. Moskva, Zagotizdat,
1961. 123 p. (MIRA 15:7)
(Grain trade--Costs)

POVARENENYKH, A.S., doktor geol.-miner. nauk, prof., otv. red.;
AGAFONOVA, T.N., kand. geol.-miner. nauk, dots., red.;
BELEVITSEV, Ya.N., prof., red.; GAMUSSEVICH, B.A., kand.
geol.-miner. nauk, dots., red.; GLADKIY, V.N., inzh.,
red.; IVANTISHIN, M.N., doktor geol.-miner. nauk, red.;
PLATONOV, A.N., inzh., red.; KHATUNTSEVA, A.Ya., kand.
geol.-miner. nauk, red.; ZAVIRYUKHINA, V.N., red. izd-va;
TURBANOVA, I.A., tekhn. red.

[Theoretical and genetic problems of mineralog. and geo-
chemistry] Teoreticheskie i geneticheskie voprosy mineralo-
logii i geokhimii. Kiev, Izd-vo AN USSR, 1963. 165 p.
(MIRA 16:12)

1. Akademiya nauk USSR, Kiev. Ukrainskoye otdeleniye Vse-
soyuznogo mineralogicheskogo obshchestva. 2. Chlen-
korrespondent AN Ukr.SSR (for Belevitsev).
(Mineralogy) (Geochemistry)

PLATONOV, A. N., starshiy inzh.; YAKOVLEV, V. I., inzh.

RSL set for municipal and rural automatic telephone exchanges. Vest.
svyazi 22 no.1:15-17 Ja '62. (MIRA 14:12)

1. Leningradskaya oblastnaya direktiya radiotranslyatsionnykh setey
(for Platonov).
2. Vsevolozhskaya ~~ny~~onnaya kontora svyazi (for Yakovlev).
(Telephone, Automatic)

PLATONOV, A.N.

Anatase crystals from pegmatite granites of the Tablenovo-
Iteymenskiy pluton (northern Kazakhstan). Zap. Ukr. otd.
Min. ob-va [no.1]:128-132 '62. (MIRA 16'8)

1. Institut geologicheskikh nauk AN UkrSSR, otdel mineralogi,
Kiyev.

BORINEVICH, Anatoliy Antonovich; dotsent, kand.ekonom.nauk; PLATONOV,
A.N., kand.ekonom.nauk, red.; VYSOTSKAYA, R.S., red.;
SAVEL'Yeva, Z.A., tekhn.red.

[Problems of the economics of grain receiving enterprises]
Voprosy ekonomiki khlebopriemnykh predpriatii. Pod red.
A.N.Platonova. Moskva, Izd-vo tekhn. i ekon.lit-ry po voprosam
zagotovok, 1961. 150 p. (MIRA 15:2)
(Grain elevators)

TOVSHEYN, Konstantin Matveyevich; PLATONOV, A.N., kand. ekon. nauk,
red.; VOLKOV, P.N., red.; GOLUBEVA, L.A., tekhn. red.

[Analysis of the managerial operations of grain-receiving
enterprises] Analiz khoziaistvennoi deiatel'nosti khlebo-
priemnykh predpriatii. Pod red. A.N.Platonova. Moskva,
TsINTI, 1963. 69 p. (MIRA 16:12)
(Odessa Province--Grain elevators--Accounting)

POVARENNIKH, A.S., doktor geol.-miner. nauk, prof., otv. red.;
 AGAPONOVA, I.N., kand. geol.-miner. nauk, doc., red.;
 SAVRUSOVICH, A.A., kand. geol.-miner. nauk, doc., red.;
 GLADELII, V.H., inzh., red.; KANISHIK, A.H., kand.
 geol.-miner. nauk, red.; DOVINENKO, N., doktor geol.-
 miner. nauk, prof., red.; PLATONOV, A.H., inzh., red.;
 KHATUNTSEVA, A.Yu., kand. geol.-miner. nauk, red.;
 ZAVTRYUKHINA, V.H., red.

[Chemical composition and internal structure of minerals]
 Khimicheskiy sostav i vnutrennyy stroenie mineralov. Kiev,
 Naukova dumka, 1962. 216 p. (U.S.A. 12:1)

1. Vsesoyuznoye mineralogicheskoye obshchestvo. Ekspertsy
 otdeleniye.

POVARENNYKH, A.S., doktor geol.-miner. nauk, prof., otv. red.;
 GAVRUSEVICH, B.A., kani. geol.-miner. nauk, dots., red.;
 IVANTISHIN, M.N., doktor geol.-miner. nauk, red.; LADA EKH
 Ye.K., prof., red.; LOGVINENKO, N.V., doktor geol.-miner.
 nauk, prof., red.; MITSKEVICH, B.F., kani. geol.-miner. nauk
 red.; PLATONOV, A.N., ml. nauchn. sotr., red.; SENDYUK, O.F.,
 red.

[Morphology, properties, and genesis of minerals] Morfologiya,
 svoistva i genezis mineralov. Kiev, Naukova dumka, 1965.
 186 p. (NIRA 12:5)

1. Vsesoyuznoye mineralogicheskoye obshchestvo. Ukrainskoye
 otdeleniye. 2. Chlen-korrespondent AN Ukr.SSR (for Lazarenko).

PLATONOV, A.N., inzh., otv. red.; POVARENNYKH, A.S., doktor geologo-min. nauk, prof., glav. red.; AGAFONOVA, T.N., kand. geol.-min. nauk, dots., red.; BELEVTSSEV, Ya.N., prof., red.; GAVRUSEVICH, B.A., kand. geol.-min.nauk, dots., red.; GLADKIY, B.N., inzh., red.; IVANTISHIN, M.N., doktor geol.-miner. nauk, red.; KHATUNTSEVA, A.Ya., kand. geol.-miner. nauk, red.; ZAVIRYUKHINA, V.N., red.; DAKHNO, Yu.M., tekhn. red.

[Annals of the Ukrainian Branch of the All-Union Mineralogical Society] Zapiski Ukrainskogo otdeleniia Vsesoiuznogo mineralogicheskogo obshchestva. Kiev, Izd-vo AN USSR, 1962. 184 p. (MIRA 17:3)

1. Akademiya nauk URSR, Kiev. Ukrainskoye otdeleniye Vsesoyuznogo mineralogicheskogo obshchestva. 2. Chlen-korrespondent AN Ukr.SSR (for Belentsev).

PLATONOV, P.M.: IBILOGENNO, 1971.

Relating and the geological structure of the ...
60/4440-421 104. 1971, 14, 7

1. Institut geologicheskikh nauk AN UkrSSR, Kiev.

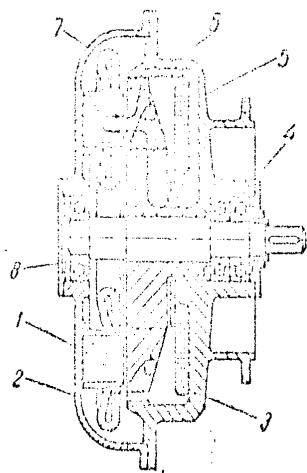
ILLEGIBLE

PLATONOV, A. M.

"Investigation of the Operation of Marine Engine 3- D-6 on Natural Gas in a Gas Liquid Cycle." Cand Tech Sci, Leningrad Inst of Water Transport Engineers, Min River Fleet USSR, Leningrad, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

ACC NR: AP6031522



its poles are not subjected to bending forces (as is the case in claw-type construction); (3) The new construction is stiff and has good heat removal and ventilation conditions. "Cand. Techn. Sc. G. N. Fridman, Engineers Ye. V. Kel'tseva, E. I. Sapalov, V. P. Pyatkov, N. I. Shcherbakov, S. K. Eytminovich, and others took part in developing the design and manufacturing practices of the new generator." Orig. art. has: 6 figures and 1 table.

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 004

Card 2/2

ACC NR: AP6031522

SOURCE CODE: UR/0292/66/000/009/0021/0023

AUTHOR: Meyerovich, Ye. A. (Engineer); Palastin, L. M. (Candidate of technical sciences); Platonov, A. M. (Candidate of technical sciences); Popov, K. K. (Engineer); Serebryanik, L. B. (Engineer); Sobolev, I. S. (Engineer); Syzrantsev, V. I. (Engineer)

ORG: none

TITLE: Disk-type brushless synchronous generator

SOURCE: Elektrotehnika, no. 9, 1966, 21-23

TOPIC TAGS: synchronous generator, electric machine, brushless generator, electric generator, magnetic circuit

ABSTRACT: A general description of a new design (Author's Certificate 169656, Bull. izobr., 1965, no. 7) of disk-type synchronous generator (see figure) is presented; the generator was developed at VNIDEM. This design is an improvement over a previous "externally-closed-magnetic-circuit" construction (VZP). Design features and some characteristics of both are compared. These conclusions are offered: (1) The new design has a smaller weight and axial length than other types of brushless synchronous generators; (2) The new rotor has high mechanical strength;

Card 1/2

UDC: 621.313.322

PLATONOV, A.L.; POL'KIN, S.I.; BYKOV, Yu.A.

Froth collapse in flotation plants. Izv. vys. ucheb. zav.;
tsvet. met. 4 no.4:30-32 '61. (MIRA 14:2)

1. Vishnevogorskoye rudoupravleniye, Krasnoyarskiy institut
tsvetnykh metallov. Rekomendovana kafedroy obogashcheniya
poleznykh iskopayemykh Krasnoyarskogo instituta tsvetnykh
metallov.

(Flotation)

On the Mechanism of the Protective Effect of Alcohol SOV/20-126-6-57/47
in Mice Treated With X-rays

catalase activity (Table 2) at early moments after the irradiation is not changed but rapidly reduced at the climax of the irradiation damage. 3) The preceding introduction of alcohol does not effect the catalase activity soon after the irradiation but inhibits somewhat the activity reduction of the ferment at the climax of the irradiation damage. 4) The statement that the catalase does not play a rôle in the increase of resistance of the mice against the irradiation in the presence of alcohol is based upon the obtained results. 5) The early damages of the bone marrow are inhibited by a preceding introduction of alcohol. There are 3 tables and 12 references, 1 of which is Soviet.

ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Institute of Biological Physics of the Academy of Sciences, USSR)

PRESENTED: March 6, 1959, by L. S. Shtern, Academician

SUBMITTED: March 6, 1959

Card 3/3

On the Mechanism of the Protective Effect of Alcohol SOV/20-26-6 57 17
in Mice Treated With X-rays

to an oxidative system reacting immediately with oxygen causes the catalase to act as peroxidase in forming a compound with H_2O_2 and to oxidize alcohol to aldehyde. If the processes in vivo proceed according to the above-mentioned rules (as in vitro), it may be assumed that either the ability of the catalase to split H_2O_2 or its peroxidase function is activated. The object of this paper was 1) to determine the conditions under which the protective effect of the alcohol on the irradiation effect can be caused; 2) the explanation of the effect of preceding introduction of alcohol on the catalase- and alcohol-dehydrase of the liver at different moments after the irradiation. 3) The explanation of the effect of the introduction on the structural changes of the nucleoproteids of the bone marrow in the irradiation. The mice slept after the interperitoneal introduction of an alcohol solution of 25% in a physiological sodium chloride solution 30 minutes before the irradiation. In this state they were irradiated. Table 1 shows the effect of this treatment on the duration of life of the irradiated mice. This shows that 1) the duration of life is prolonged. 2) The

Card 2/3

17 (1), 21 (3)

AUTHORS: Zubkova, S. K., Platonov, A. L.

307/26-126-6-57/60

TITLE: On the Mechanism of the Protective Effect of Alcohol in Mice Treated With X-rays (K mekhanizmu zashchitnogo deystviya spirta pri rentgenovskom obluchenii myshey)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 6, pp 1354 - 1357 (USSR)

ABSTRACT: The ethyl alcohol solution introduced before the irradiation increases considerably the surviving of different animals (Refs 1-5). The hypotheses on the topic mentioned in the title are mostly only speculative and do not take sufficiently into account the rôle of the biochemical factors in this process. Since the catalase protects the cells against the accumulation of toxic H_2O_2 it may be assumed that substances being able to activate the catalase or increasing its rate of circulation exercise a protective influence. Alcohol is able to protect the catalase against the inhibiting effect of some products of the metabolism in vitro. Mrs. L. S. Shtern (Ref 6) referred to them with the collective noun "anticatalase". On the other hand, it was proved that the addition of catalase and alcohol in vitro

Card 1/3

L 03003-57 ENT(0)/CSS-2/EWT(1)/VVP(m)/REC(K)-2/T TJP(c) ACT/TT/ON
 ACC NR: AP6033390

SOURCE CODE: UR/0293/66/004/005/06/0/0693

AUTHOR: Platonov, A. K.

ORG: none

TITLE: A study of the properties of correcting maneuvers in interplanetary flights

SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 5, 1966, 670-693

TOPIC TAGS: interplanetary flight, Mars flight, Venus flight, trajectory ^{determination} correction, ~~correcting maneuver~~

ABSTRACT: This article deals with the properties of correcting maneuvers in flights to Mars and Venus under the assumption that the corrections are carried out by instantaneous changes of velocity of the flight vehicle and that complete information on this motion is available. The time deviation δT from the nominal value of time of approach to the planet and the coordinates ξ and η of the flight vehicle in the picture plane (the plane passing through the center of a planet perpendicular to the planetocentric velocity vector) are considered as characteristic correction parameters. General formulas connecting the vector of the correcting impulse V with the δT , ξ , and η are derived, using linear approximation, and the range of their applicability is analyzed. In addition, such characteristics of correcting maneuvers as the optimal correction plane and zero-direction, the ellipse of influence, the ellipse of possible impulses, the forced variation of time, and the effectiveness of

Card 1/2

UDC: 629.191

ENEYEV, T.M.; PLATONOV, A.K.; KAZAKOVA, R.K.

Determining parameters of the orbit of an artificial satellite
according to data on ground observations. Isk.sput.Zem.
no.4:43-55 '60. (MIRA 13:5)
(Artificial satellites) (Orbits)

PLATONOV, A.I., doktor tekhnicheskikh nauk.

New edition of a textbook on organizing train movements. ("Organizing the movement of trains." D.P. Zagliadimov, A.P. Petrov, E.S. Sergeev. Reviewed by A.I. Platonov). Zhel.dor.transp. 39 no.6:92-95 Ja '57. (MLRA 10:7)
(Railroad management) (Zagliadimov, D.P.) (Petrov, A.P.)
(Sergeev E.S.)

MEDVEDEV, A.M.; PLATONOV, A.I.; FILATOV, P.A.; GVOZDEV, A.A., prof.,
doktor tekhn.nauk, otv.red.; KNOREE, A.K., general-mayor inzh.-
tekhn.sluzhby, otv.red.; KASHIRTSEV, I.A., tekhn.red.

[Reconstruction of industrial buildings; examples from practice]
Vosstanovlenie promyshlennykh zdani; primery iz praktiki.
Moskva, Dorizdat Gushosdora NKVD SSSR, 1945. 75 p. (MIRA 12:11)
(Industrial buildings--Maintenance and repair)

PLATONOV, A.I., prof., doktor tekhn.nauk; ZEMBLINOV, S.V., prof., doktor tekhn.nauk

New papers on the operation of railroads ("Uchenye Zapiski" of the Department of "Railroad Operations". Reviewed by A.I. Platonov, S.V.Zemblinov). Zhel.dor.transp. 42 no.5:95-96 My '60. (MIRA 13:9)

(Railroads--Management)

PLATONOV, A.I., prof., doktor tekhn. nauk

Improving the method of taking up and traffic organization.
Zhel. dor. transport no. 3:58 64 My '64. (MIRA 18:2)

PLATONOV, Aleksandr Il'ich, doktor tekhnicheskikh nauk; PEYSAKHSON, B.E.,
redaktor; VERINA, G.P., tekhnicheskiiy redaktor.

[Interaction of operations in marshalling yards; theory, practice and
calculations] Vzaimodeistvie protsessov na sortirovochnykh stantsiyakh;
teoriia, praktika i rashchety. Moskva, Gos.transp. zhel-dor.izd-vo
1955. 223 p. (MLRA 8:11)
(Railroads--Making up trains)